



Roma 7-10 Novembre 2015 Ergife Palace Hotel

## CONGRESSO NAZIONALE SIOT

LA PROTESIZZAZIONE NEL PAZIENTE AD ELEVATA RICHIESTA FUNZIONALE  
LA FRAGILITÀ SCHELETRICA NELLE OSTEOPATIE METABOLICHE



### *SUPERSPECIALISTICA SIA-SIGASCOT*

Fallimento  
dell'osteoplastica  
nel F.A.I.

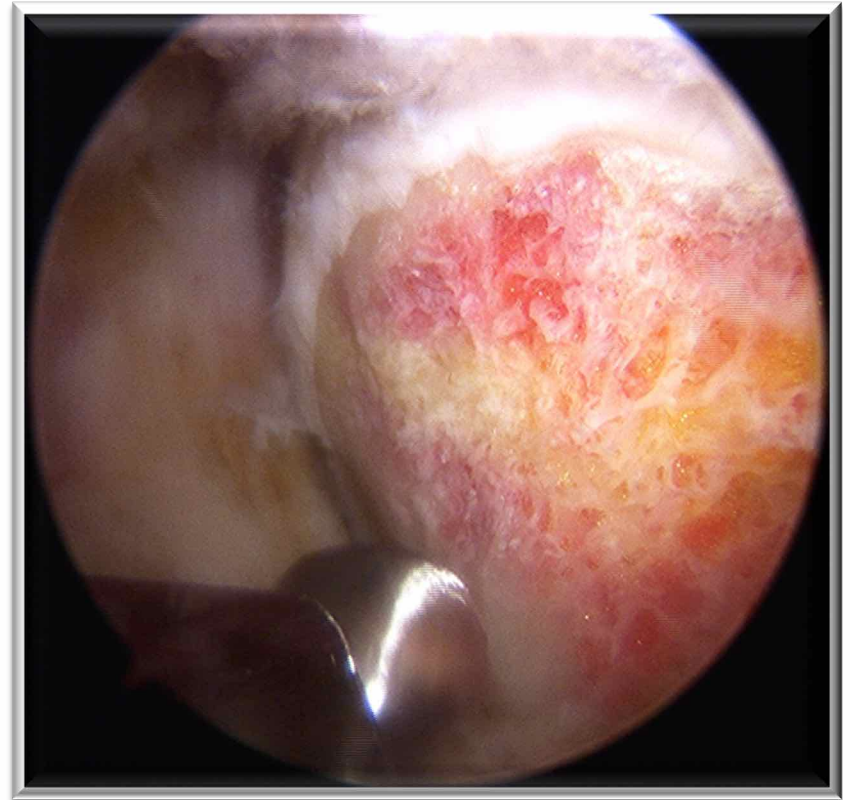
*Raul Zini*



Maria Cecilia Hospital Cotignola - Ravenna

# FALLIMENTI DELLA CHIRURGIA ARTROSCOPICA NEL F.A.I.

*Incompleta  
osteoplastica  
prima causa  
di revisione  
artroscopica*



## PERSISTENZA DELL'IMPINGEMENT

Clin Orthop Relat Res. 2015 Apr;473(4):1388-95. doi: 10.1007/s11999-014-4069-9.

**Residual deformity is the most common reason for revision hip arthroscopy: a three-dimensional CT study.**

Ross JR<sup>1</sup>, Larson CM, Adeoye O, Kelly BT, Bedi A.



# FALLIMENTI DELL'OSTEOPLASTICA

6 studi - 448 revisioni

Rev. Osteoplastica 64.3%

Larson	18%
Gwatemy	17%
Aprato	31%
Philippon	95%
Heyworth	75%
Domb	66%



Femorale 37.2 %  
Acetabolare 26.4 %

*Arthroscopy*. 2015 Oct;31(10):2047-55. doi: 10.1016/j.arthro.2015.03.039. Epub 2015 May 29.

**Revision Hip Arthroscopy Indications and Outcomes: A Systematic Review.**

Sardana V<sup>1</sup>, Philippon MJ<sup>2</sup>, de Sa D<sup>1</sup>, Bedi A<sup>3</sup>, Ye L<sup>4</sup>, Simunovic N<sup>5</sup>, Ayeni OR<sup>6</sup>.

# PERCHE' FALLISCE?

## errore indicazione

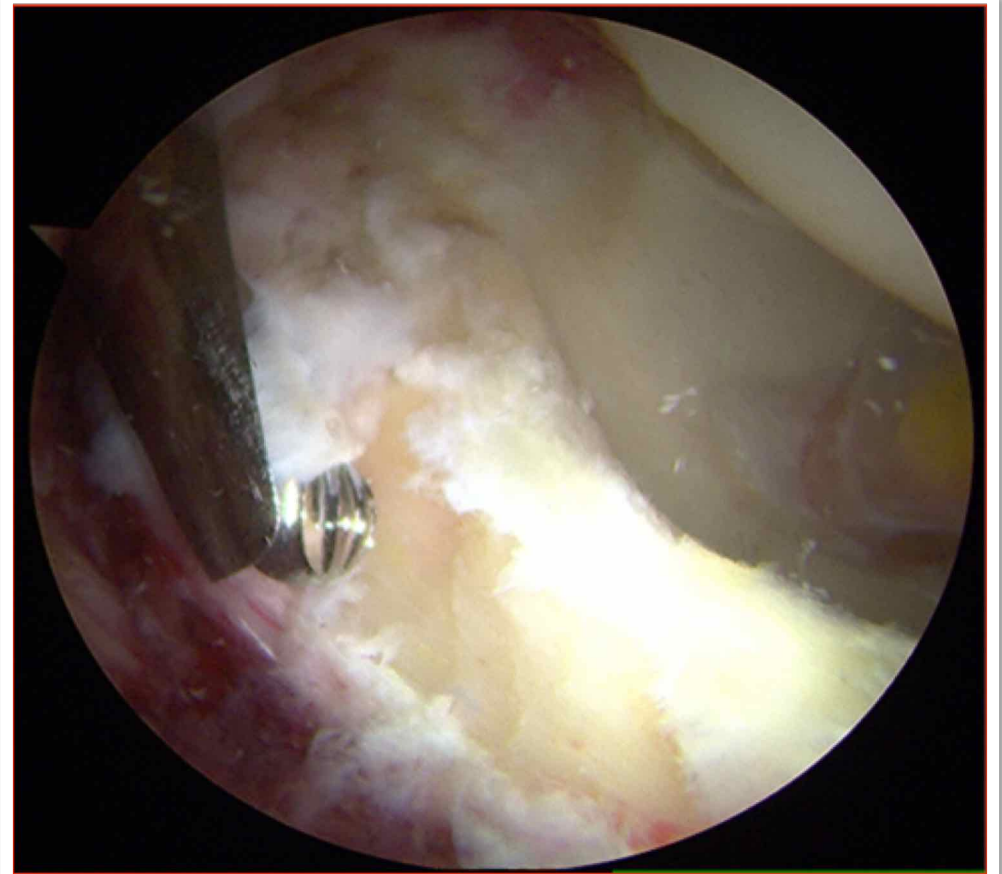
- displasia
- artrosi
- misto
- subspine
- ileopsoas

## errore di planning

## errore di tecnica

- femore
- acetabolo

## errore riabilitazione



# ERRORE DI INDICAZIONE

quadro displasico evidente



Donna  
22 aa  
Ballerina

## DISPLASIA

# ERRORE DI INDICAZIONE

quadro degenerativo evidente



Uomo  
35 aa  
Karate

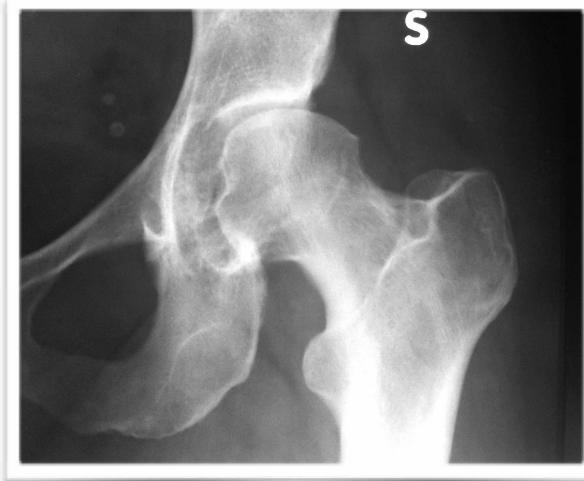
## ARTROSI

# ERRORE DI INDICAZIONE



quadro degenerativo evolutivo

Donna 45 aa  
impiegata



## ARTROSI

# ERRORE DI INDICAZIONE

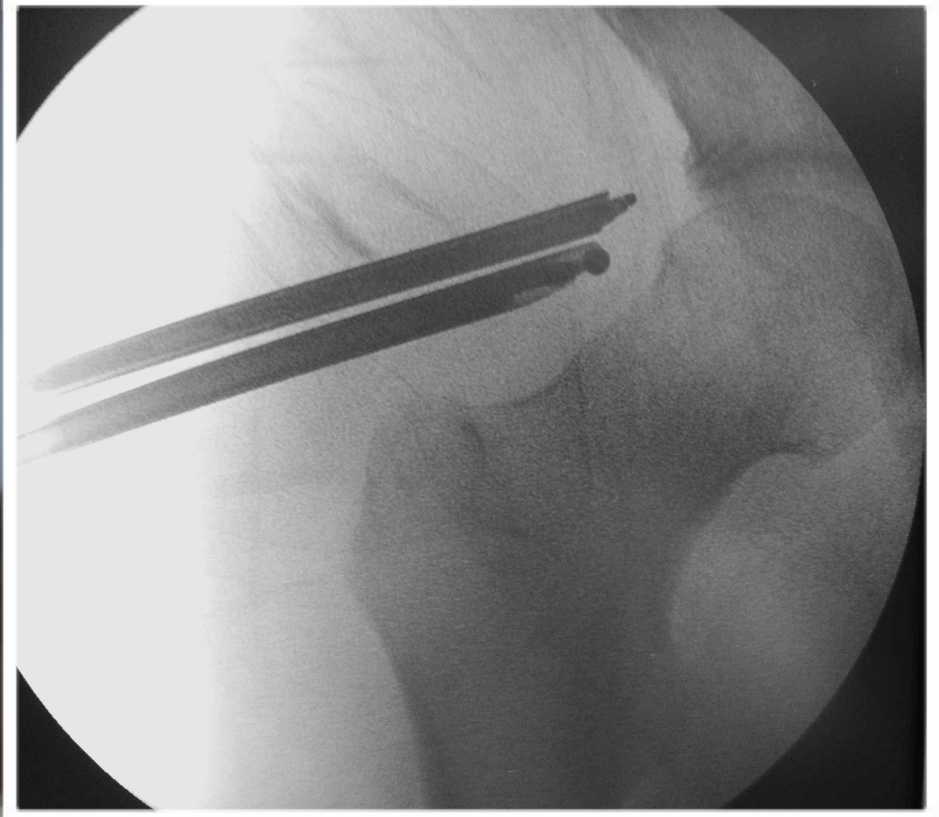
Acetaboloplastica inadeguata



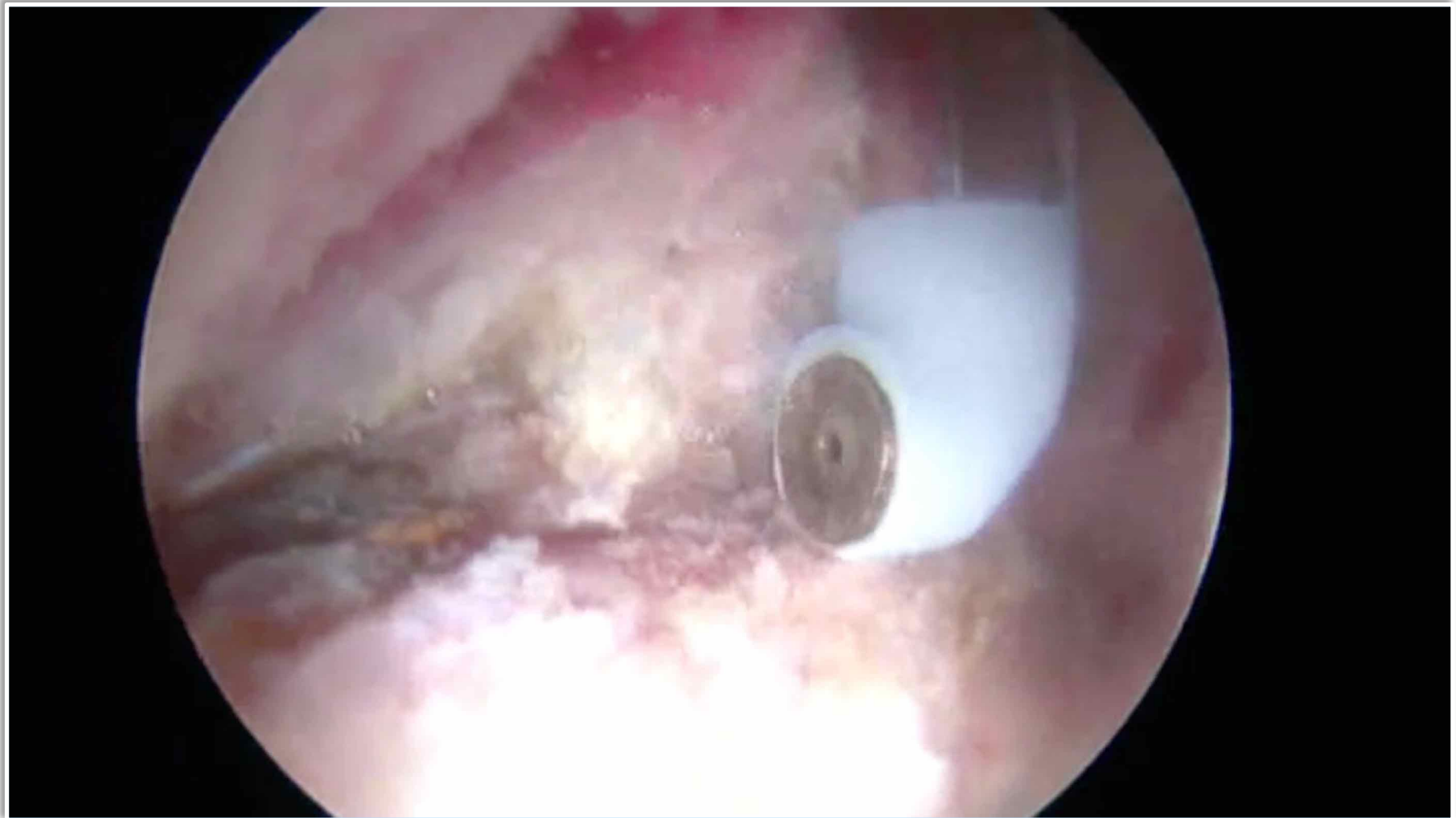
Uomo 26 aa  
2 artroscopie

## IMPINGEMENT MISTO





# ERRORE DI INDICAZIONE



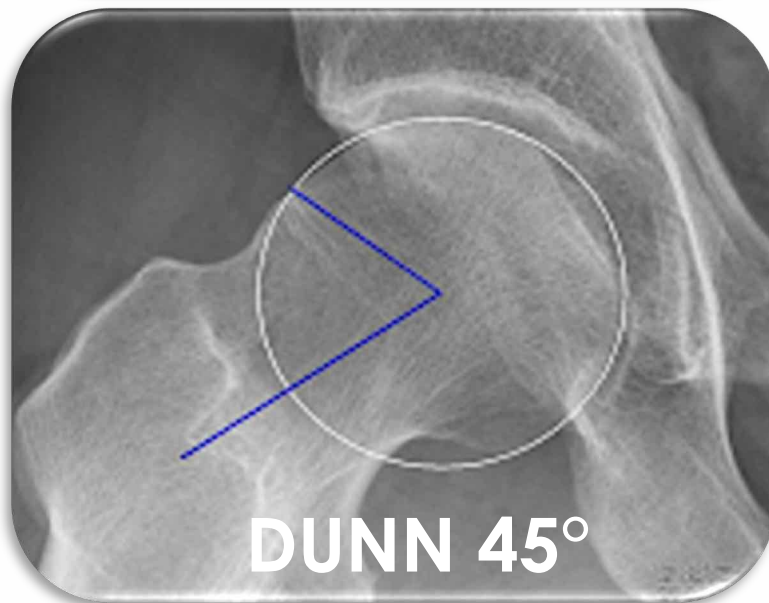
**SUB-SPINE**

# ERRORE DI INDICAZIONE



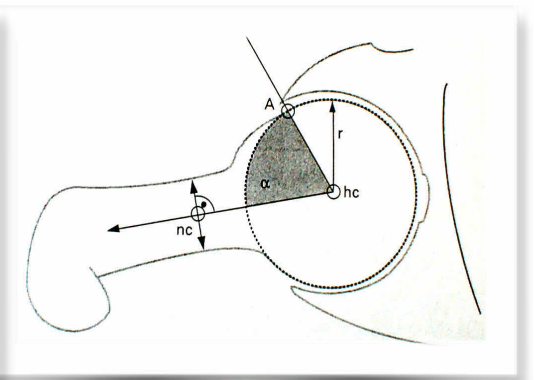
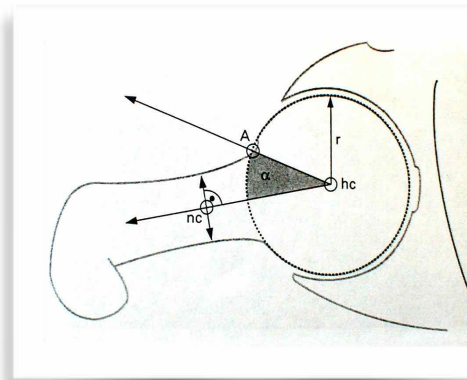
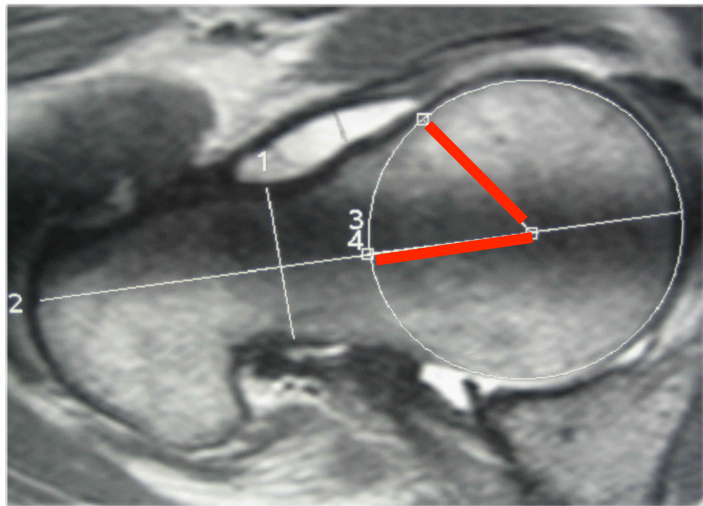
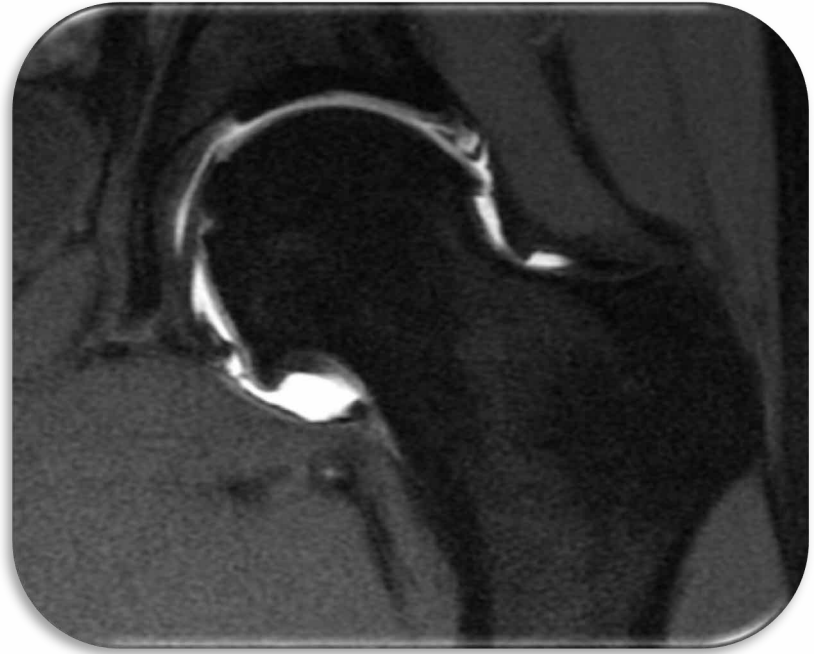
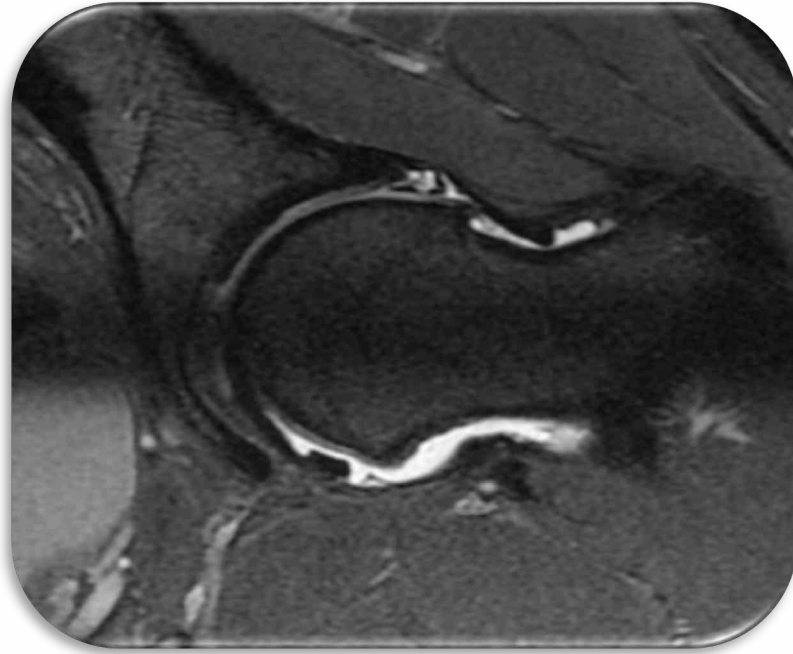
**ILEO-PSOAS**

# ERRORE DI PLANNING



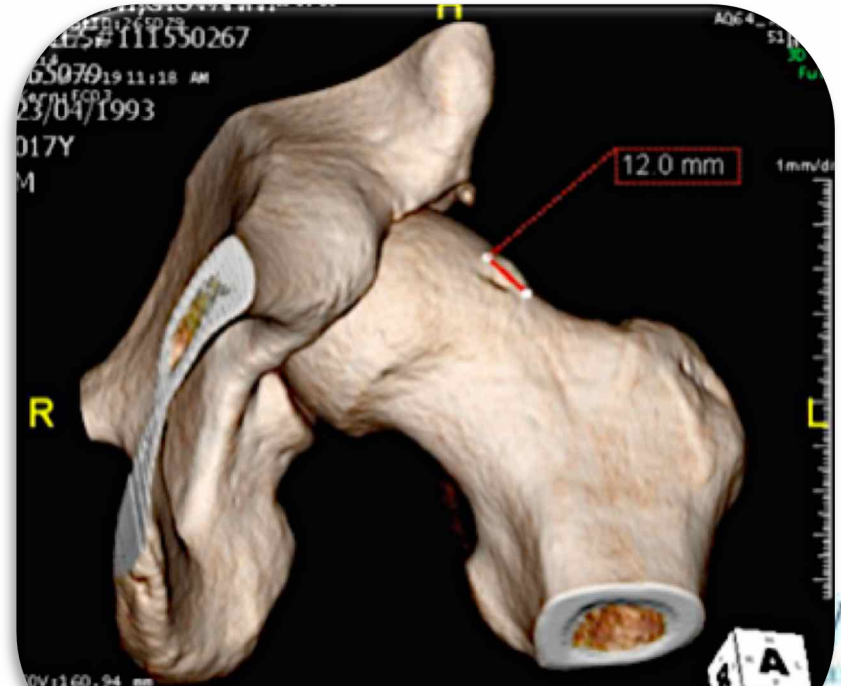
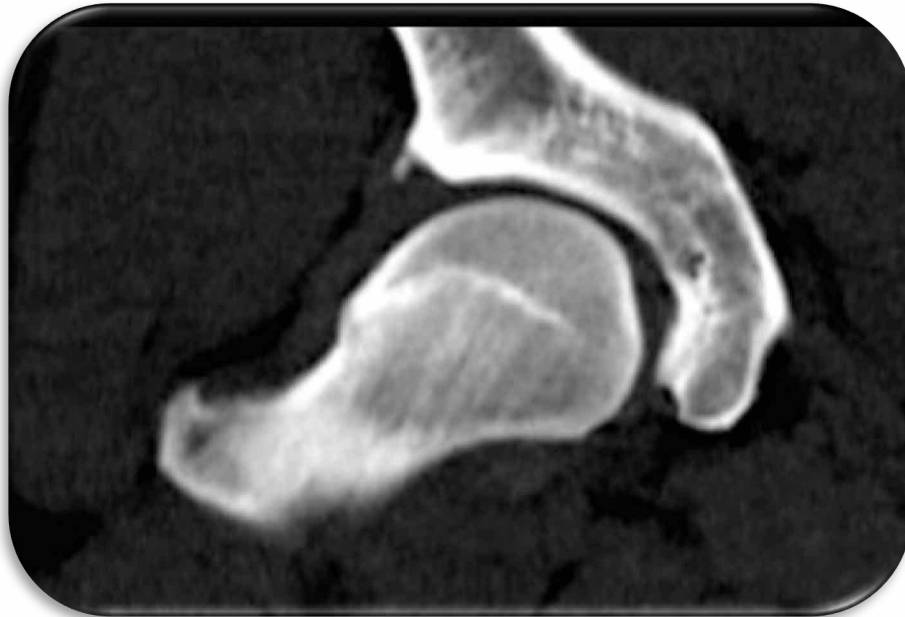
STUDIARE LE RADIOGRAFIE

# ARTRO-RMN



ANGOLO ALFA

# TAC-3D



# DINAMIC 3D CT

Landmarks Planning Report Patient 1 - Left Hip

Femur Acetabulum ROM X-ray

Femur  
 Original  
 Correction  
 Resected

Acetabulum  
 Original  
 Correction  
 Resected

12  
9 3 6

0 mm 5 mm

Femur Acetabulum ROM X-ray

Femur  
 Original  
 Correction  
 Resected

Acetabulum  
 Original  
 Correction  
 Resected

12  
9 3 6

0 mm 5 mm

CE Angle X-Sign Version Coverage Correction

3D Coverage  
 Radial

12  
6

-1 SD  
Avg.  
+1 SD

Coverage %

- Anterior 41.8%
- Superior 62.2%
- Posterior 47.1%
- Total 41.4%

Resection Options

Anterior-Superior Over-Coverage

Coverage Limit

-1 SD Avg. +1 SD

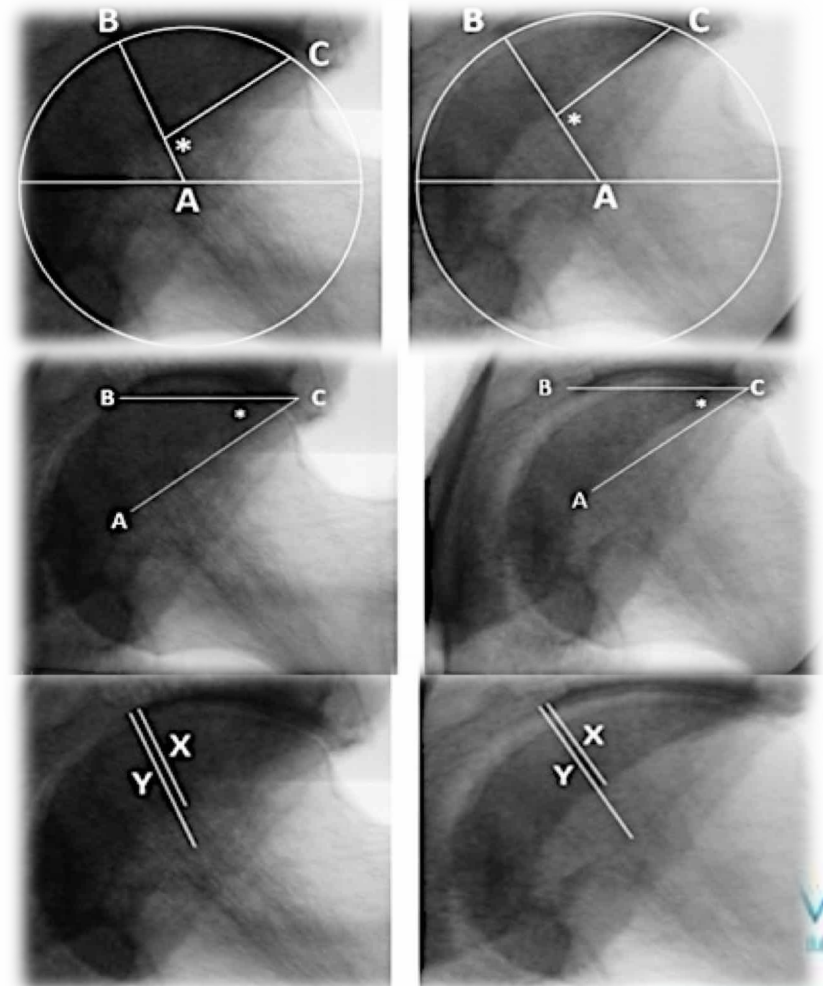
Lateral CE Angle

	X-ray	CT
Original	36°	36°
Original	36°	36°

# New Radiographic Parameters to Describe Anterior Acetabular Rim Trimming During Hip Arthroscopy

Christopher E. Gross, M.D., Michael J. Salata, M.D., Katherine Manno, B.A.,  
Vamshi Yelavarthi, B.A., Joseph U. Barker, M.D., James Williams, Ph.D., Walter Virkus, M.D.,  
Charles Bush-Joseph, M.D., and Shane J. Nho, M.D.

**ARA** (AnteriorRimAngle)  
**AWA** (AnteriorWallAngle)  
**AMR** (AnteriorMarginRatio)  
**CEA** (CenterEdgeAngle)  
**TONNIS ANGLE**





# ERRORE DI TECNICA



- AMPLIFICATORE DI BRILLANZA
- DINAMICA ARTROSCOPICA

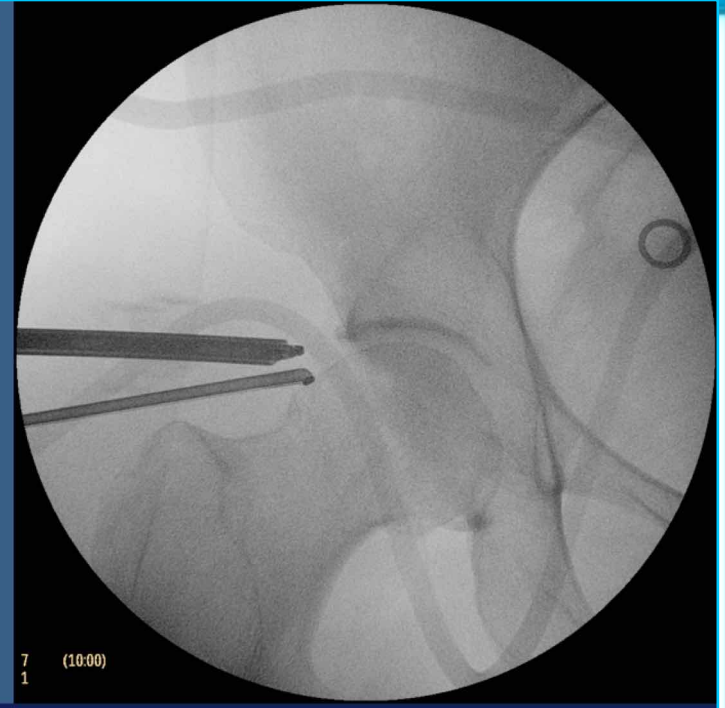
**VALUTAZIONE INTRA-OPERATORIA**



PHILIPS BV Pulsera  
Villa Maria Cecilia Hospital  
Paziente  
ANNA MARIA ZOTTOLO

Esame  
S

Ortopedia  
07-09-2012

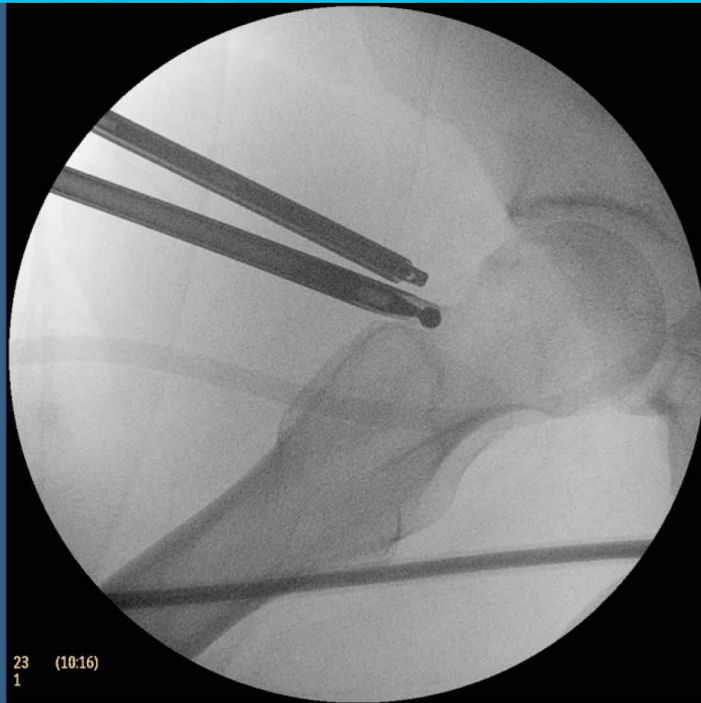


7 (10:00)  
1

PHILIPS BV Pulsera  
Villa Maria Cecilia Hospital  
Paziente  
ANNA MARIA ZOTTOLO

Esame  
S

Ortopedia  
07-09-2012



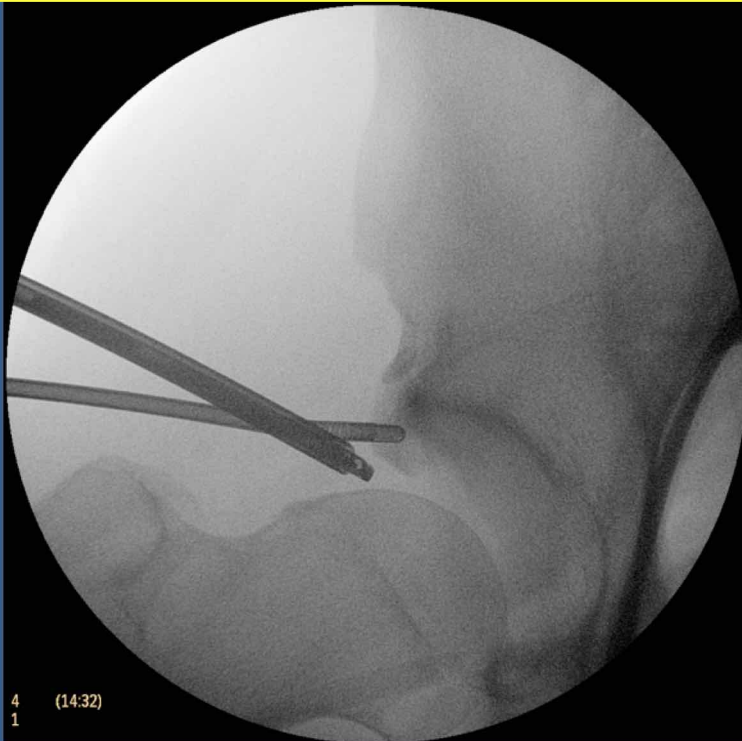
23 (10:16)  
1



PHILIPS BV Pulsera  
Villa Maria Cecilia Hospital  
Paziente  
Senza nome

Esame S

Ortopedia  
21-03-2011

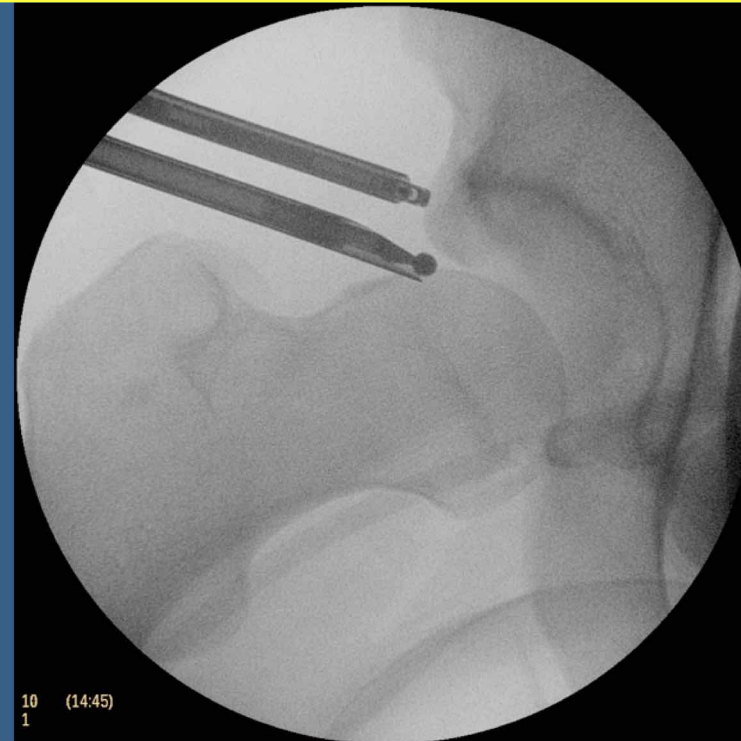


4  
1 (14:32)

PHILIPS BV Pulsera  
Villa Maria Cecilia Hospital  
Paziente  
Senza nome

Esame S

Ortopedia  
21-03-2011

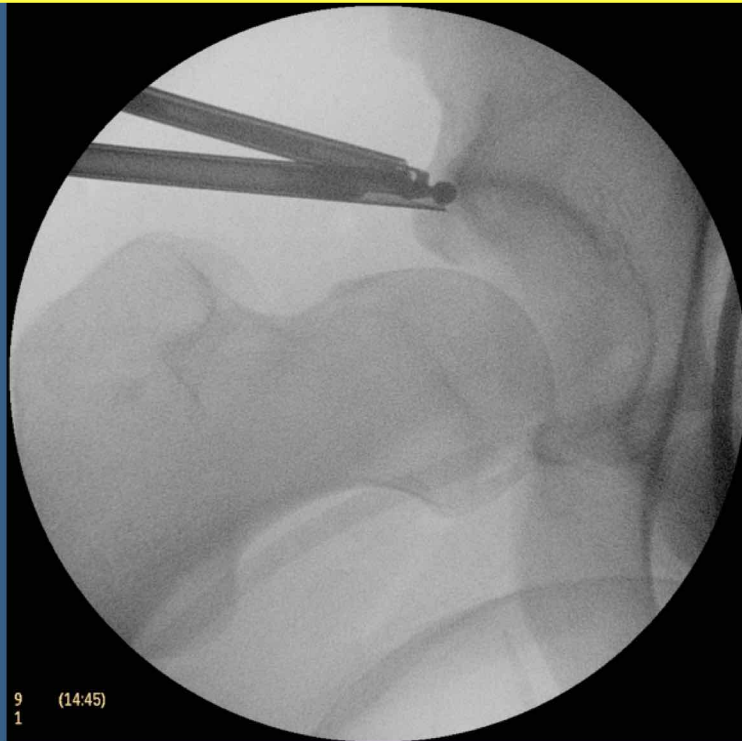


10  
1 (14:45)

PHILIPS BV Pulsera  
Villa Maria Cecilia Hospital  
Paziente  
Senza nome

Esame S

Ortopedia  
21-03-2011

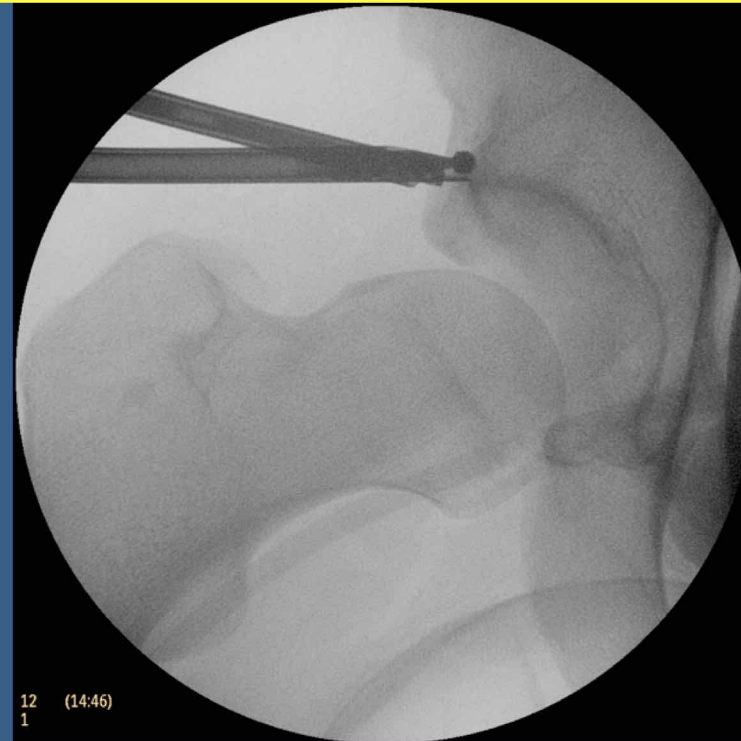


9  
1 (14:45)

PHILIPS BV Pulsera  
Villa Maria Cecilia Hospital  
Paziente  
Senza nome

Esame S

Ortopedia  
21-03-2011



12  
1 (14:46)

# Plastica femorale insufficiente



# Completamento femoroplastica



# ERRORE DI RIABILITAZIONE

*Post-Operative Rehabilitation after Hip Arthroscopy; A Search for the Evidence*  
CHEATHAM S - ENSEKI K - KOLBER M  
J Sport Rehabil 2014

*Rehabilitation after labral repair and femoroacetabular decompression: criteria-based progression through the return to sport phase*  
WAHOFF M et al.  
Int J Sport Phys Ther 2014

- scarsità di evidenze
- individualizzazione
- procedure chirurgiche



## Progressione funzionale

CRITERI DI AVANZAMENTO  
NON TEMPI PRE-DEFINITI

- ➔ stage 1: immediata post-op R
- ➔ stage 2: transizione alla R sub-acuta e ritorno alla normalità
- ➔ stage 3 - 4 - 5 ritorno allo sport con multipli livelli

## RIABILITAZIONE “SBAGLIATA”

- PROBLEMATICA FREQUENTE
- LUNGHI TEMPI DI GUARIGIONE
- RESIDUI POSTUMI DOLOROSI

# CONCLUSIONI



# FALLIMENTI DELL'OSTEOPLASTICA

## ERRORI DI GESTIONE

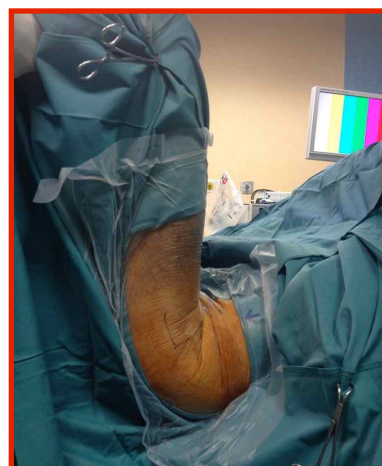
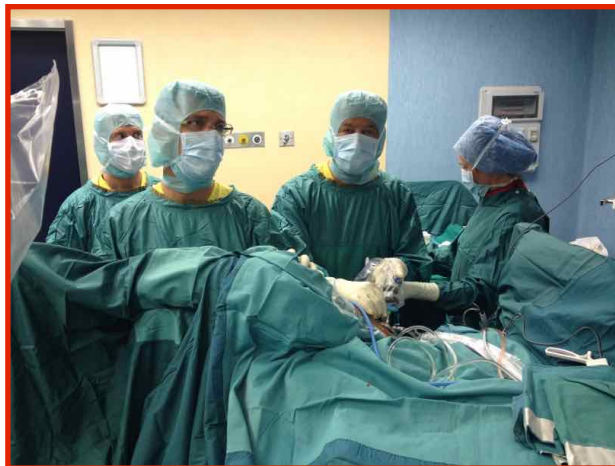
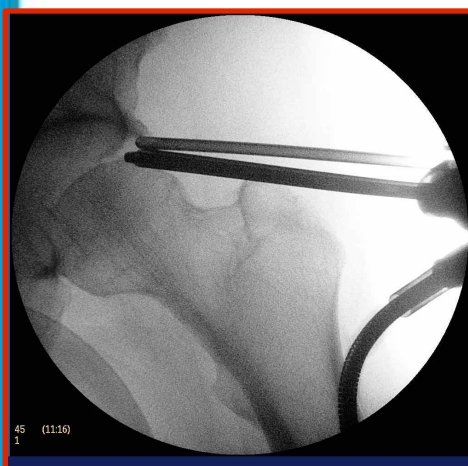
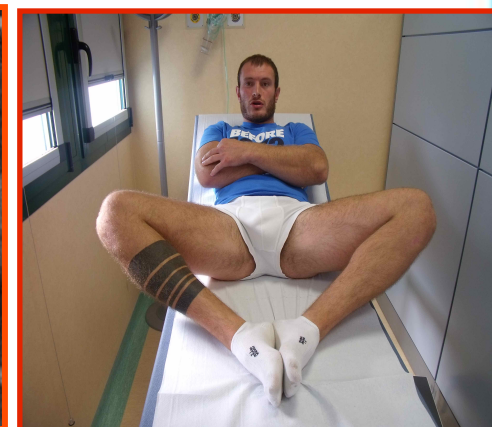
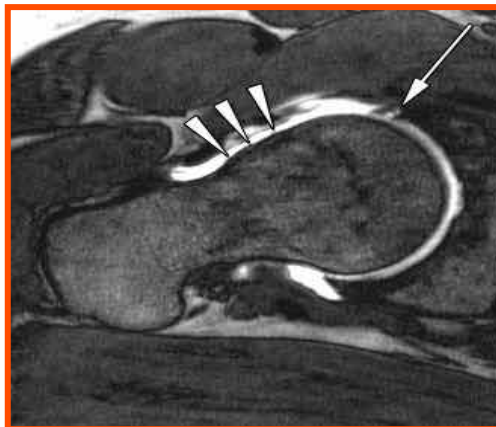
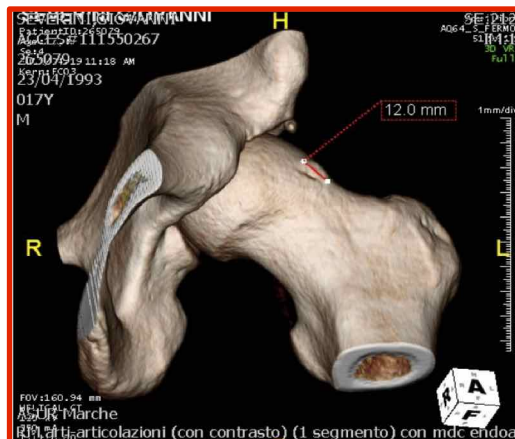
- **PRE-OPERATORIA**  
*DIAGNOSI ED INDICAZIONE*
- **INTRA-OPERATORIA**  
*PLANNING E TECNICA*
- **POST-OPERATORIA**  
*RIABILITAZIONE*



***LA CAUSA PIU' FREQUENTE  
DI REVISIONE ARTROSCOPICA***



# PERCORSO VIRTUOSO



## CORRETTO PLANNING PRE-OPERATORIO

- Rx
- TAC 3D
- Artro-RMN
- Esame Clinico

## ACCURATA TECNICA OPERATORIA

- Utilizzo mirato del BV
- Valutazione artroscopica (soprattutto dinamica)

## CORRETTA RIABILITAZIONE



# GRAZIE PER L'ATTENZIONE



[raulzini@gmail.com](mailto:raulzini@gmail.com)